Serial No. 10/528,598   PATENT
Amdt. dated July 7, 2009   PF020122
Reply to Final Office Action of April 9, 2009   Customer No. 24498

REMARKS

Claims 1-10 remain pending in this application. Claims 1, 6, and 8 have been amended by this response. The amendments have been made to clarify the claimed subject matter. Support for the claim amendments is found throughout the specification and specifically at page 4, lines 6-26. No new matter has been added by these amendments.

Objection of claims 6 and 8

Claims 6 and 8 have been objected to for not fully complying with 37 CFR 1.111(b) because the amended subject matter is not underlined. In accordance with the suggestion in the Office Action the phrases "a means for" in claim 6 and "including" in claim 8 have been underlined to show amended subject matter. Furthermore, claim 8 has been amended to recite "wherein the switch further comprises means for including." In view of the amendments to claims 6 and 8 it is respectfully submitted that this rejection is satisfied and should be withdrawn.

Rejection of claims 1-10 under 35 U.S.C. 102(e)

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Mahajan et al. (US 6735201)

The present claimed arrangement provides a method for routing data packets in a routing device connecting a first network and a second network. The routing device includes a switch. The method includes the steps, at the switch, of: (a) receiving a frame from a device connected to the first network; (b) forwarding the frame to an internal bridge function of the routing device; wherein the bridge function is performed by a means for forwarding a frame based on a destination address of the frame; (c) checking whether the frame contains a multicast group management message and in the affirmative, creating a new frame including as destination address the destination address

of an internal multicast group management module of the routing device and as payload at least the multicast management data of the received frame; and (d) forwarding this new frame to the internal bridge function.

Mahajan describes a network multicast-switching apparatus used in a switched network environment able to detect and process differently, specific types of multicast control messages and multicast data messages received by the switch. The switch may include a central forwarding engine (CFE) which examines the IP header portion of the message packet to determine whether the message is one of a specific protocol type of multicast messages. If the CFE determines that the message is of that protocol type, the CFE compares the message's MAC group destination address to a plurality of predetermined MAC destination addresses indicative of types of control message packets that are not of a specific class of control messages for which special processing is desired. (See col. 4, lines 66-67 and col. 5, lines 1-18)

Mahajan neither discloses nor suggests "(c) checking whether the frame contains a multicast group management message and in the affirmative, creating a new frame comprising as destination address the destination address of an internal multicast group management module of the routing device and as payload at least the multicast management data of the received frame" as recited in claim 1 of the present arrangement. Mahajan also neither discloses nor suggests "(d) forwarding this new frame to the internal bridge function" as recited in claim 1 of the present arrangement.

The Office Action asserts that switch 300 of Mahajan (See Fig. 3, col. 9, lines 13-21) is a routing device. Furthermore, the Office Action also asserts that element 408 is the internal bridge function of step (b) of the present claimed arrangement, that element 412 is the internal bridge function of step (d), and that element 410 is the multicast group management module that

5

performs steps (c) and (d). Applicants respectfully disagree. The Office Action misinterprets the reference because element 412 of Mahajan is not a bridge. Element 412 of Mahajan is a resolution engine, that receives a forwarding index and determines, whether to ignore a forwarding index and supply a forwarding command (see Fig. 4, col. 10, lines 22-44). The bridge element of Mahajan is actually represented by element 408, which is a bridge forwarding engine that examines MAC header information to obtain a MAC destination address for transmittal to the resolution engine 412 (see Fig. 4, col. 9, lines 39-61). As element 408 is the bridge, element 410, contrary to the assertion made in the Office Action, does not send any data to bridge 408 (See Fig. 4). Instead, element 410 only sends data to resolution engine 412. Thus, "checking whether the frame contains a multicast group management message…creating a new frame" and "forwarding this new frame to the internal bridge function" as described in the present claimed arrangement, is not performed by element 410 as asserted by the Office Action. Thus, Mahajan, unlike the present claimed arrangement does not disclose or suggest"(c) checking whether the frame contains a multicast group management message and in the affirmative, creating a new frame comprising as destination address the destination address of an internal multicast group management module of the routing device and as payload at least the multicast management data of the received frame" as recited in claim 1 of the present arrangement. Mahajan also neither discloses nor suggests "(d) forwarding this new frame to the internal bridge function" as recited in claim 1 of the present arrangement.

        In addition, Mahajan also neither discloses nor suggests "routing data packets…at said switch" as recited in claim 1 of the present claimed arrangement. Mahajan neither discloses nor suggests performing steps for "routing data packets" at a switch module. The present claimed arrangement provides a switch that detects IGMP IP Frames in Ethernet frames transmitted by devices on a LAN. When an IGMP IP Frame is detected, the switch

"delivers the original frame to the IC3, the Ethernet layer being removed in the CPU, when a packet is handled by the latter." (page 4, lines 6-11) The switch also creates a new frame and incorporates a detected frame (page 4, line 12). Thus, "routing data packets" occurs at the "switch" as recited in claim 1 of the present claimed arrangement. On the contrary, Mahajan does not describe performing routing of data packets at the switch module. Instead, Mahajan describes a bridge element 408, which is a bridge forwarding engine that examines MAC header information to obtain a MAC destination address for transmittal to the resolution engine 412 (see Fig. 4, col. 9, lines 39-61). Therefore, Mahajan neither discloses nor suggests "routing data packets...at said switch" as recited in claim 1 of the present claimed arrangement. Consequently, it is respectfully submitted that the rejection of claim 1 is satisfied and should be withdrawn.

Dependent claims 2-5 are dependent on claim 1 and are considered patentable for the reasons set forth above regarding claim 1. Therefore, it is respectfully submitted that the rejection of claims 2-5 is satisfied and should be withdrawn.

Independent claim 6 is an apparatus claim containing features similar to those found in method claim 1 and is considered patentable for the reasons set forth above regarding claim 1. In addition, claim 6 is also patentable because Mahajan neither discloses nor suggests that "the switch is a means for determining whether a received frame comprises a multicast group management message" as recited in amended claim 6 of the present arrangement. Mahajan does not describe any routing of data performed at a switch. Thus, Mahajan neither discloses nor suggests that "the switch is a means for determining whether a received frame comprises a multicast group management message" as recited in amended claim 6 of the present

arrangement. Therefore, it is respectfully submitted that the rejection of claim 6 is satisfied and should be withdrawn.

Dependent claims 7-10 are dependent on claim 6 and are considered patentable for the reasons set forth above regarding claim 6. Therefore, it is respectfully submitted that the rejection of claims 7-10 is satisfied and should be withdrawn.

Having fully addressed the Examiner's rejections, it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at the phone number below, so that a mutually convenient date and time for a telephonic interview may be scheduled.

No additional fee is believed due. However, if an additional fee is due, please charge the additional fee to Deposit Account 07-0832.

Respectfully submitted,

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